



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/902,110	07/11/2001	William Holm	0104-0353P	8194

2292 7590 07/22/2004

BIRCH STEWART KOLASCH & BIRCH  
PO BOX 747  
FALLS CHURCH, VA 22040-0747

EXAMINER

LORENZO, JERRY A

ART UNIT	PAPER NUMBER
----------	--------------

1734

DATE MAILED: 07/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/902,110	HOLM ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Jerry A Lorengo	1734	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 May 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 20-26 and 32-39 is/are pending in the application.
- 4a) Of the above claim(s) 27-30 and 40-55 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 20-26 and 32-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date: _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>9/20/01;11/08/01</u>  | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

(1)

***Election/Restrictions***

Applicant's election of Group I, claims 20-26 and 32-39 in the paper filed May 20, 2004. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

(2)

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 20-24 and 32-37 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,511,545 to Banno et al.

Regarding applicant claims 20 and 32, Banno et al. disclose an apparatus for application of a viscous medium onto a substrate comprising (Figures 23 and 27; column 27, lines 1-45; column 33, line 10 to column 34, line 20):

(1) An applicator 1501 capable of applying a viscous medium 4 into a substrate 1,2,3;

(2) An inspection device 1502 capable of inspecting the results of the application by the applicator 0901;

Art Unit: 1734

(3) A Processor 1504,1505,1506 capable of determining any application errors based the inspection by the inspection means 1502; and

(4) A correction device 1501 (the applicator 1501 can function as both the applicator and the correction device) for correcting at least some of the error detected by the Processor 1504,1505,1506. Two alternative embodiments of the apparatus of Banno et al. are illustrated below:

FIG. 23

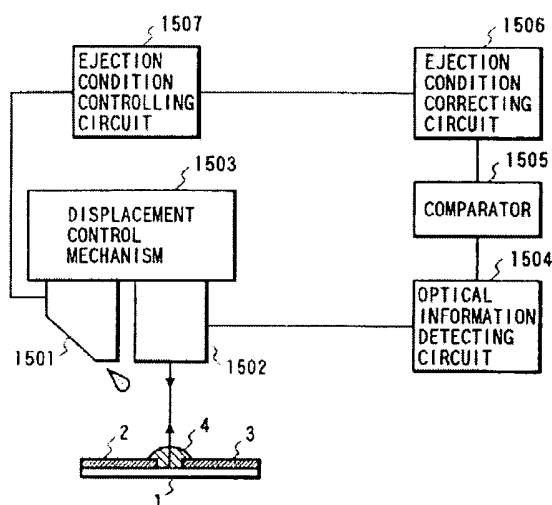
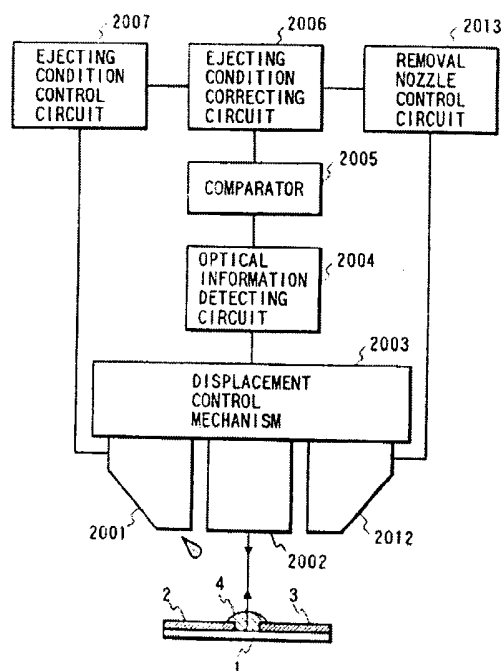


FIG. 27



Regarding applicant claims 21 and 33, Banno et al. disclose that the processing means 1504,1505,1506 comprises an evaluating means (comparator) 1505 for evaluating each of the determined errors and deciding (via ejection condition correcting circuit 1506) to what extent the determined errors are to be detected (column 27, line 66 to column 28, line 26).

Regarding applicant claims 22 and 34 and 35, Banno et al. disclose that the correction means comprises (as shown in Figure 23; column 12, lines 4-22) the applications means 1501 (which is an ink-jet ejecting device) for jetting additional viscous medium 4 onto the substrate 1,2,3 and/or a removing means 2012 (as shown in Figure 27; column 13, lines 21-31; column 33,

Art Unit: 1734

line 46 to column 34, line 20) which is capable of removing surplus viscous medium 4 from the substrate 1,2,3

Regarding applicant claims 23, 24, 36 and 37, Banno et al. disclose that the application means 1501 or 2001 comprises an ink-jet ejecting device which is capable of jetting the initial amount and any addition amount of viscous medium 4 in response to any error detection and correction (column 33, line 46 to column 34, line 20).

(3)

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 25, 26, 38 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,511,545 to Banno et al. in view of the admitted prior art.

Art Unit: 1734

Although Banno et al. disclose that the application device 1501, 2001 preferably comprises a jetting device, the are silent as to the use of a screen printer or contact dispenser, as set forth in applicant claims 25, 26, 38 and 39, in place of the jetting device.

Nonetheless, it would have been obvious to one of ordinary skill in the art at the time of invention to utilize such coating means in the apparatus of Banno et al. in place of the jetting means motivated by the fact that the admitted prior art disclose that screen printing and contact dispensing are conventional means and method of dispensing known in the art (specification, page 5, lines 11-19; page 6, line 25 to page 7, line 2; page 9, lines 1-9).

(4)

***Response to Arguments***

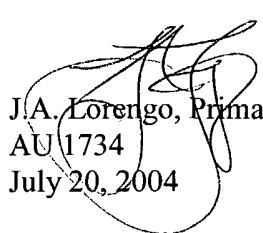
Applicant's arguments filed April 13, 2004 is acknowledged. They have been fully considered but are moot in view of the new ground(s) of rejection.

(5)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerry A Lorengo whose telephone number is (571) 272-1233. The examiner can normally be reached on Monday through Friday, 8:30 A.M. to 5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Fiorilla can be reached on (571) 272-1187. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
J.A. Lorengo, Primary Examiner  
AU 1734  
July 20, 2004